

August 15, 2001

***Briefing to
RSAC
on
NAJPTC Project***

Alan Polivka

***AVP Communications and Train Control Technology
Transportation Technology Center, Inc.***

Agenda

- ◆ **Project Overview**

- ◆ **Alan Polivka, TTCI**

- ◆ **Industry Standards Development**

- ◆ **Howard Moody, AAR**

PTC Program Management



FRA



IDOT



AAR

NAJPTC Program Management Committee



ARINC
Team

Prime
Contractor

Systems
Engineer

Systems
Integrator

Other
Contractors

Lockheed Martin Team

Eastern Project,
Simulation Tools, etc.

NAJPTC Project Objectives

◆ Demonstrate PTC **Safety Functionality**

- * Prevent Train to Train Collisions
- * Enforce Speed Restrictions
- * Protect Roadway Workers Operating Under Specific Authorities

◆ Develop **Interoperability** Standards

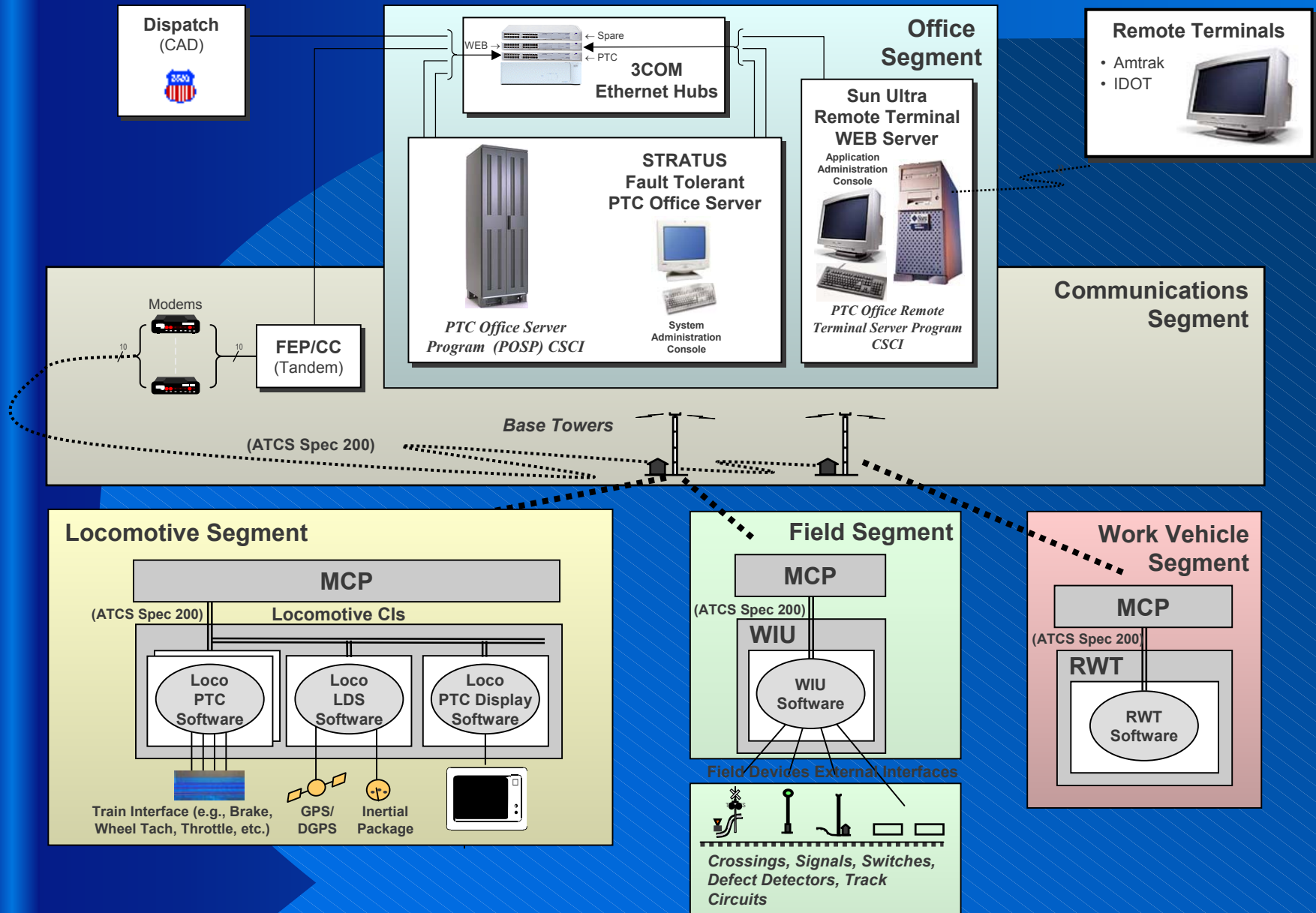
◆ Develop and Demonstrate **Revenue-Ready** System for Operation of Passenger Trains > **79 mph** Intermixed with Freight

Design must be **Cost-Effective**

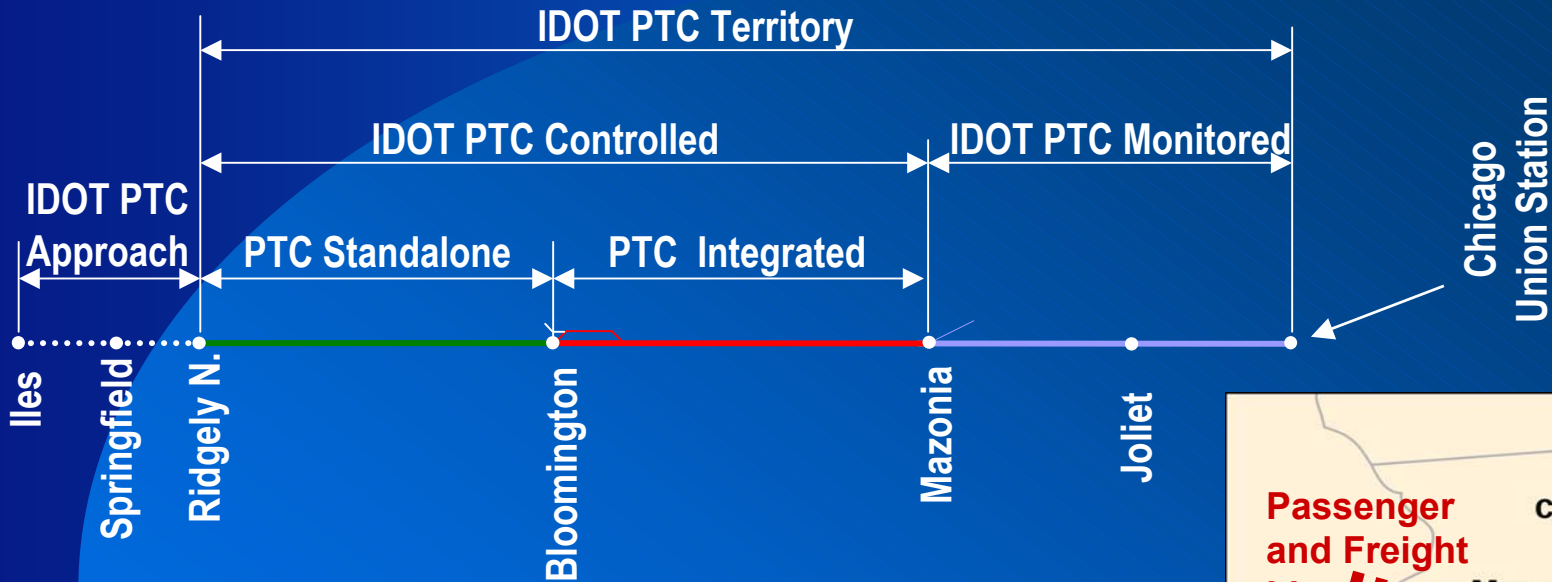
System Features

- ◆ **Warnings / Enforcement of Authorities and Speeds**
 - * *Warnings provided in advance (except emergencies)*
 - * *Enforcement is last resort*
- ◆ **Locomotive Activation of Crossing Warning Systems**
 - * *Eliminates need to extend crossing warning track circuits for high speed operation*
- ◆ **Modular Design**
- ◆ **Pacing & Fine Resolution Train Tracking**

IDOT PTC System Design Baseline

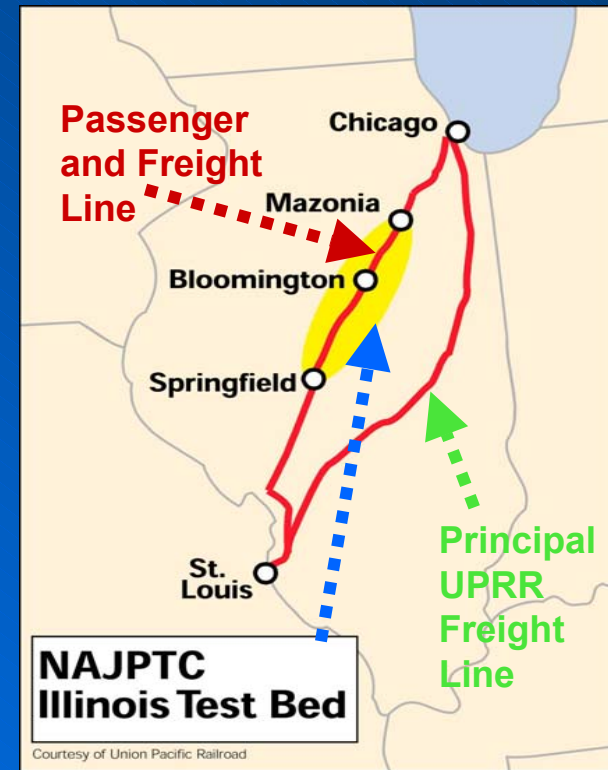


Overview of IDOT PTC Territory



Handle Mixed Traffic ...

- Passenger
- Freight
- Non-Communicating Trains



Summary

- ◆ **Project is Near Midpoint in Schedule**
- ◆ **Preliminary Design Review (PDR) held on July 17-18 (Major Milestone)**
- ◆ **ManCom Satisfied with PDR, Contingent upon Resolution of Action Items Developed During Meeting**
- ◆ **Good Progress and Momentum to Date**